Key to Scenopinidae subfamilies and genera (modified from Kelsey 1969, etc., Yeates 1992, Nagatomi et al., 1994):

1. Wing with vein M2 absent .....Scenopininae 3.
   Wing with vein M2 present ..... 2.

2. Costal vein extending around wing; sensory area on tergite 2 made up of two hemispherical regions of short setae; gonocoxal apodemes short, aedeagus straight; female tergite 8 with short setae ..... Caenotinae: ..... ***Caenotus*** (Nearctic)
   Costal vein ending just beyond vein R5; sensory area on tergite 2 made up of two hemispherical regions of short setae; gonocoxal apodemes elongate; aedeagus recurved, folded dorsally upon itself; female tergite 8 dorsally covered with greatly elongate setae..... ..... ***Cyrtosathe*** (subfamily placement *incertae sedis*) (Namibia)
   Costal vein ending at vein R5; gonocoxal apodemes greatly elongate; aedeagus straight; female tergite 8 with short setae; sensory area on tergite 2 triangular, setae with truncate apices .....Proratinae; 20.

3. Cell R5 open to the tip of wing ..... 4.
   Cell R5 closed and petiolate..... 9.

4. Vein M1+2 fading before edge of wing..... 5.
   Vein M1+2 reaching edge of wing..... 6.

5. Vein R4 branching before middle of cell R5 ....***Scenopinula*** (Australia).
   Vein R4 branching near or beyond middle of cell R5 ....***Riekiella*** (part) (Australia).

6. Vein M4+Cu normal, reaching edge of wing ..... 7.
   Vein M4+Cu fading beyond the m crossvein.... ***Seguyia*** (Afrotropical)..

7. Head longer than high, long slim flies, often glossy black, resembling *Pseudatrichia* .....***Prepseudatrichia*** (Africa).
   Head higher than long, abdomen broad..... .....***Scenopinus*** 8 (cosmopolitan).

8. Large robust flies, with long slender antennae, vein R4 branching from R5 before middle of cell R5; male 9th tergum 4 lobed ..... ***fenestralis***-group
   Medium sized flies, variable antennae, vein R4 branching from near centre of cell R5; male 9th tergum 2-lobed, open ventrally .. ***albicinctus***-group
   Medium sized flies, pear-shaped antennae, vein R4 branching from near centre of cell R5; male 9th tergum with basal portion extending ventrally, open distally, female 8th sternum longer than tergum, 9th tergum usually with short spines .....***brevicornis***-group.

Medium to small flies, short antennae, vein R4 branching beyond the middle of cell R5; male 9th tergum 2-lobed, closed below .... ***velutinus***-group.

9. Vein R5+M1+2 ending at tip of wing ..... 10.
Vein R5+M1+2 bending sharply to end in leading edge..... ..... ***Caenoneura*** (Afrotropical)

10. Long, slender black (usually glossy) flies ..... 11.
Brown, tan or gray flies ..... 13.

11. Head longer than high, body glabrous ..... 12.
Head higher than long, mouthparts atrophied, hairy ....***Belosta*** (Nearctic).

12. Ninth tergum of male about as long as high and as long as the 10th tergum, female 9th tergum and sternum subequal, tip of cell R5 blunt .. .. ***Pseudatrichia*** (Nearctic)
Ninth tergum of male much taller than long, 10th tergum longer than 9th, female 10th tergum with thick spines, tip of cell R5 acute..... .....***Neopseudatrichia*** (Australia)

13. Large robust bodied flies..... 14.
Smaller flies..... 15.

14. Very large flies with broad, blunt abdomens in both sexes, frontal area swollen so that antennae project from middle of head; hairs often flat, scale like ..... ***Metatrichia*** (Cosmopolitan)
Smaller flies, with blunt abdomens, frons not swollen, male genitalia with flange-like lobes on inside of 9th tergum..... ***Paratrichia***. (Australia)

15. Pollinose scales [pruinescence?] on thorax ..... 16.
Black shiny flies wthout scales..... 19.

16. Wing with vein R4 branching from cell R5 near the base..... 17.
Wing with vein R4 branching from cell R5 near the middle ..... 18.

17. Males with two long aedeagal spines, females with 8th sternum excavated on distal margin, 9th tergum often with row of stiff spines on posterior margin .....***Brevitrichia*** (New World)
Males with short aedeagal parameres, females with long pointed 8th sternum, 9th tergum with stiff spines. ***Heteromphrale*** (South America)

18. Males with 9th tergum as two flaps covering genitalia, females with distinctive spines on 9th tergum..... ***Propebrevitrichia*** (Africa)

Males with 9th tergum as two lobes, short; females with reduced spines on 9th tergum; female 8th sternum longer than tergum, pointed..... .....***Riekiella*** (Australia) (part)
Males with 9th tergum as four long lobes, elongate; female 8th segment elongate, blunt, tergum and sternum subequal .... ***Paramonova*** (Australia)
Males with 9th tergum as two [?] lobes, short; females with reduced spines on 9th tergum; female 8th sternum longer than tergum, 3-lobed apically .....***Irwiniana*** (South America)

19. Antennae pointed, vein R4 branching from distal third of cell R5 ....***Stenomphrale*** (Afrotropical)
Antennae blunt, vein R4 branching before middle of cell R5 .....***Pseudomphrale*** (Afrotropical)

20. Antennal flagellum gradually tapered apically, triangular or lancet shaped; apical style small and inconspicuous; probosis largely sclerotised, usually longer than face; mesonotum and scutellum with bristles; thickening of costa eding at or just beyond apex of R5 ..... 22.
Antennal flagellum not as above; probosis fleshy and shorter than face, mesonotum without bristles, scutellum with or without bristles..... 21.

21. Antennal flagellum abruptly narrower at apical portion, with a tuft of hairs at apex, without apical style; thickening of costa ending at or just beyond apex of R4; scutellum without bristles; abdomen largely white or pale yellow ..... ***Caenotoides*** (Nearctic)
Antennal flagellum gradually narrowed apically, with thick apical style that is wider than apex of preceding segment; thickening of costa ending at or just beyond apex of R5; scutellum with a pair of marginal bristles; abdomen dark brown or black..... ***Acaenotus*** (Nearctic)

22. Vein M2 arising from M1; female occiput not forming postocular rim .... 23.
Vein M2 arising from discal cell; female with postocular rim ....***Jackhallia*** (Neotropics)

23. Antennal flagellum with small and inconspicuous style .... ***Prorates*** (Nearctic)
Antennal flagellum with style.....***Alloxytropus*** (Afrotropical)